



COMMITTEE ON

SCIENCE, SPACE, AND TECHNOLOGY

REPUBLICANS Frank Lucas, Ranking Member

Opening Statement of Ranking Member Frank Lucas
Full Committee Hearing: Reimagining our Innovation Future
Thursday, April 15, 2021, 10:00 a.m. EST

Thank you, Chairwoman Johnson, for holding this hearing on the future of American innovation.

I believe this is one of the most essential concerns facing our committee, because our commitment to America's scientific progress is what underpins every other issue that comes before us: from space exploration to clean energy development, and from the strength of our economy to our national security.

Our investment in basic and early-stage federal research has given us lower food prices, better health care treatments, cleaner and cheaper energy, and widespread access to reliable broadband internet (just not yet on my farm in rural Oklahoma). In short, our investment in basic federal research, infrastructure, and workforce development pays massive dividends.

American companies use the knowledge and tools gained in our labs to commercialize innovations that improve our lives and our economy. Historically, the United States has been the world's largest investor in research and development. U.S. government and industry spent a combined \$511 billion on R&S in 2016, generating over \$860 billion for our nation's economy while supporting over 8 million jobs. And numerous studies have concluded that as much as 85 percent of the long-term growth in America's economy is from scientific and technological advances.

But our leadership in science and technology is under threat. China has likely surpassed us in total R&D spending already. While they increased their research investment by 56% between 2011 and 2016, ours fell by 12%.

The Chinese Communist Party has an aggressive and strategic plan for their scientific development. They've been very clear that they intend to overtake us in critical technologies. Communist leadership in China hasn't been shy about how they plan to outpace us. In addition to outspending us, they're looking to acquire foreign research, attract premier talent by building out world-class research infrastructure, and build up

their domestic STEM workforce. With our leadership in science and technology at risk, we need to reevaluate our commitment to the fundamentals we need to succeed: basic research, cutting-edge facilities, and a thriving STEM workforce.

Chairwoman Johnson and I agree on the need to support federal research. A few weeks ago we introduced legislation to reauthorize the National Science Foundation. Along with Research and Technology Subcommittee Chairwoman Stevens and Ranking Member Waltz, we put forth the NSF For the Future Act, which increases the funding to \$13 billion over five years. It invests in industries of the future, works to expand STEM education and develop our STEM workforce, and includes important provisions to secure our research from foreign theft.

I appreciate the bipartisan work that went into this legislation, and I look forward to working to move it forward. It dovetails nicely with the Securing American Leadership in Science and Technology Act, or SALSTA, which is legislation I've introduced to double our funding in basic research and create a national strategy to focus our investment on critical technologies like Artificial Intelligence, cybersecurity, and quantum computing.

SALSTA will invest in our research infrastructure so we have the facilities required to do groundbreaking research. It helps to grow a strong American STEM pool of talent through workforce development and STEM education programs. And it makes it easier to transfer technological breakthroughs from the lab to private industry through regulatory reform. Taken together, SALSTA is a comprehensive and strategic approach to investing in America's science and technological development.

We're still benefiting today from research investments made generations ago. And that begs the question: What investments are we making for our grandchildren, and their grandchildren? Are we being strategic and forward-thinking in our commitment to federal research and development?

We have a fantastic panel of witnesses here today, and I'm looking forward to their insights into that question. As a wheat farmer, I'm an eternal optimist- I plant seed in the ground and I'm optimistic that I'll have a good yield each season. And I'm optimistic that we can work together in a bipartisan fashion to strengthen our research industry and invest in the future of our scientific development.

With that, I yield back.